REFERENCE 1

```
ΑN
     132:175851 CA
     Pipecolic acid derivatives for vision and memory disorders
TΙ
     Ross, Douglas T.; Sauer, Hansjorg; Hamilton, Gregory S.; Steiner, Joseph
TN
     Guilford Pharmaceuticals Inc., USA
PΑ
     PCT Int. Appl., 126 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LΑ
     ICM A61K031-00
IC
     1-11 (Pharmacology)
CC
     Section cross-reference(s): 27
FAN.CNT 1
                                             APPLICATION NO.
                       KIND DATE
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                                             ______
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                       Α3
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             CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
              IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD,
             MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,
             SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
             ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                              20000306
                                            AU 1999-55557
                                                               19990812
     AU 9955557
                       Α1
PRAI US 1998-134417
                       19980814
     WO 1999-US18242 19990812
GΙ
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AB Pipecolic acid derivs. are prepd. for treating vision disorders, improving

Ι

vision, treating memory impairment, or enhancing memory performance in an animal. These compds. bind to immunophilin FKBP12 and preferably do not have immunosuppressive activity. Affinity for FKBP12 is measured as inhibition of prolyl peptidyl cis-trans isomerase (rotamase). Thus, pipecolic acid ester I inhibited rotamase with a Ki of 20 nM, showed a clearance rate of 41.8 .mu.L/min, and rescued 56.6% of optic nerve axons from degeneration 14 days after optic nerve transection in rats (dose and route of administration not stated).

ST pipecolate deriv prepn vision memory disorder; immunophilin FKBP12 ligand vision memory disorder

IT Proteins, specific or class

RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (FKBP (FK 506-binding protein); pipecolic acid derivs. for vision and memory disorders)

IT Proteins, specific or class

RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (FKBP-12 (FK 506-binding protein, 12,000-mol.-wt.); pipecolic acid

```
derivs. for vision and memory disorders)
ΙT
     Eye
        (conjunctiva, disorder; pipecolic acid derivs. for vision and memory
        disorders)
ΙT
        (cornea, disorder; pipecolic acid derivs. for vision and memory
        disorders)
ΙT
     Immunity
        (disorder, of eye; pipecolic acid derivs. for vision and memory
     Lacrimal gland
IT
     Memory, biological
     Vision
        (disorder; pipecolic acid derivs. for vision and memory disorders)
TT
     Memory, biological
        (enhancement of; pipecolic acid derivs. for vision and memory
        disorders)
ΙT
     Radicals, biological studies
     RL: ADV (Adverse effect, including toxicity); BIOL (Biological study)
        (eye disorders mediated by; pipecolic acid derivs. for vision and
        memory disorders)
ΙT
     Vision
        (improvement of; pipecolic acid derivs. for vision and memory
        disorders)
IT
     Eye, disease
        (injury; pipecolic acid derivs. for vision and memory disorders)
IT
        (lid, disorder; pipecolic acid derivs. for vision and memory
disorders)
     Aging, animal
IT
        (memory impairment in; pipecolic acid derivs. for vision and memory
        disorders)
ΙT
     Structure-activity relationship
        (neuroprotectant; pipecolic acid derivs. for vision and memory
        disorders)
IT
     Cytoprotective agents
        (neuroprotectants; pipecolic acid derivs. for vision and memory
        disorders)
ΙT
     Brain
        (optic tract, disorder; pipecolic acid derivs. for vision and memory
        disorders)
ΙT
     Nerve
        (optic, disorder; pipecolic acid derivs. for vision and memory
        disorders)
    Cataract
ΤТ
     Eye, disease
     Oligodendrocyte
        (pipecolic acid derivs. for vision and memory disorders)
ΤТ
     Immunophilins
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (pipecolic acid derivs. for vision and memory disorders)
ΙT
     Eye, disease
        (retinopathy; pipecolic acid derivs. for vision and memory disorders)
ΙT
        (uvea, disorder; pipecolic acid derivs. for vision and memory
        disorders)
IT
     95076-93-0, Rotamase
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (inhibition of; pipecolic acid derivs. for vision and memory
disorders)
    186268-50-8P
     RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic
     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); USES (Uses)
        (pipecolic acid derivs. for vision and memory disorders)
     535-75-1D, Pipecolic acid, derivs. 53123-88-9, Rapamycin 141084-63-1
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    (Therapeutic use); BIOL (Biological study); USES (Uses)
       (pipecolic acid derivs. for vision and memory disorders)
    122-97-4, 3-Phenyl-1-propanol 2133-40-6, L-Proline methyl ester
ΙT
                   5781-53-3, Methyl oxalyl chloride 28276-08-6,
    hydrochloride
    1,1-Dimethylpropylmagnesium chloride
    RL: RCT (Reactant)
       (pipecolic acid derivs. for vision and memory disorders)
                  186268-77-9P 186268-78-0P
    139419-63-9P
IT
    RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation)
       (pipecolic acid derivs. for vision and memory disorders)
REFERENCE 2
ΑN
    132:26633 CA
    Pipecolic acid derivatives for hair growth compositions
TΙ
    Hamilton, Gregory S.; Steiner, Joseph P.
ΙN
    Guilford Pharmaceuticals, Inc., USA
PΑ
SO
    PCT Int. Appl., 103 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    English
    ICM A61K007-48
IC
    ICS A61K031-50; A61K031-435; A61K031-445; C07K005-02; C07K005-08
    62-3 (Essential Oils and Cosmetics)
CC
    Section cross-reference(s): 63
FAN.CNT 1
                   KIND DATE
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    PATENT NO.
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                          19991209 WO 1998-US11242 19980603
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            UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
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            CM, GA, GN, ML, MR, NE, SN, TD, TG
    AU 9877167
                     A1 19991220
                                       AU 1998-77167
                                                         19980603
PRAI WO 1998-US11242 19980603
    This invention relates to pharmaceutical compns. and methods for treating
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145021-41-6

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alopecia and promoting hair growth using pipecolic acid derivs.
    hair lotion contained 95% EtOH, a pipecolic acid deriv. such as
     4-(4-methoxyphenyl) butyl 1-(2-oxo-2-phenylacetyl)-2-piperidinecarboxylate
     10.0, .alpha.-tocopherol acetate 0.01, ethoxylateed hardened castor oil
     0.5, and water 9.0%, and perfume and dye.
    pipecolic acid deriv hair growth
ST
ΙT
    Hair preparations
        (creams; pipecolic acid derivs. for hair growth compns.)
ΙT
     Hair preparations
        (emulsions; pipecolic acid derivs. for hair growth compns.)
ΙT
     Hair preparations
        (growth stimulants; pipecolic acid derivs. for hair growth compns.)
ΙT
     Hair preparations
        (lotions; pipecolic acid derivs. for hair growth compns.)
ΙT
     Alopecia
     Immunosuppressants
     Shampoos
        (pipecolic acid derivs. for hair growth compns.)
ΙT
     Immunophilins
     RL: BSU (Biological study, unclassified); BIOL (Biological study)
        (pipecolic acid derivs. for hair growth compns.)
     535-75-1D, Pipecolic acid, derivs.
                                          53123-88-9, Rapamycin
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     RL: BUU (Biological use, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (pipecolic acid derivs. for hair growth compns.)
RE.CNT
(1) Armistead, D; US 5620971 A 1997 CAPLUS
(2) Astra Aktiebolaget; WO 9611943 A 1996 CAPLUS
(3) Fujisawa Pharm Co Ltd; EP 0423714 A 1987 CAPLUS
(4) Guilford Pharm; WO 9813343 A 1998 CAPLUS
(5) Nelson, F; US 5385908 A 1995 CAPLUS
(6) Skotnicki, J; US 5252579 A 1993 CAPLUS
REFERENCE 3
     128:70783 CA
AN
     Pipecolic acid derivative inhibitors of rotamase enzyme activity
TΙ
effective
     at stimulating neuronal growth
     Steiner, Joseph P.; Snyder, Solomon; Hamilton, Gregory S.
ΙN
     GPI NIL Holdings, Inc., USA; Johns Hopkins Univ. School of Medicines
PΑ
     U.S., 47 pp. Cont.-in-part of U.S. Ser. No. 474,072.
SO
     CODEN: USXXAM
DT
     Patent
     English
LA
     ICM A61K031-445
IC
     ICS A61K038-18
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(brain damage-assocd.; pipecolic acid deriv. inhibitors of rotamase enzyme activity for stimulating neuronal growth and regeneration and

ΙT

Stroke

```
treating neurol. disorders)
ΙT
    Nerves
        (facial; pipecolic acid deriv. inhibitors of rotamase enzyme activity
        for stimulating neuronal growth and regeneration and treating neurol.
        disorders)
ΙΤ
     Growth factors (animal)
     RL: BAC (Biological activity or effector, except adverse); BIOL
     (Biological study)
        (neurite extension factors; pipecolic acid deriv. inhibitors of
        rotamase enzyme activity for stimulating neuronal growth and
        regeneration and treating neurol. disorders)
     Alzheimer's disease
     Amyotrophic lateral sclerosis
     Brain injury
     Nerve degeneration
     Nervous system agents
     Nervous system diseases
     Neurons
     PC12 cell
     Parkinson's disease
     Peripheral nerve injury
     Peripheral neuropathy
     Sciatic nerve
     Spinal cord injury
     Spinal ganglion
        (pipecolic acid deriv. inhibitors of rotamase enzyme activity for
        stimulating neuronal growth and regeneration and treating neurol.
       disorders)
IT
     FKBP (protein)
     FKBP12 (protein)
     GAP-43 (protein)
     Immunophilins
    Myelin
     RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
        (pipecolic acid deriv. inhibitors of rotamase enzyme activity for
        stimulating neuronal growth and regeneration and treating neurol.
        disorders)
     Brain-derived neurotrophic factor
ΙT
    Ciliary neurotrophic factor
    Glial-derived neurotrophic factor
     Neurotrophic factors
     RL: BAC (Biological activity or effector, except adverse); THU
     (Therapeutic use); BIOL (Biological study); USES (Uses)
        (pipecolic acid deriv. inhibitors of rotamase enzyme activity for
        stimulating neuronal growth and regeneration and treating neurol.
        disorders, and use with neurotrophic factors)
                                                              59865-13-3,
IT
     9061-61-4, Nerve growth factor
                                      53123-88-9, Rapamycin
     Cyclosporin A
                    149438-31-3, WAY-124466
     RL: BAC (Biological activity or effector, except adverse); BIOL
     (Biological study)
        (pipecolic acid deriv. inhibitors of rotamase enzyme activity for
        stimulating neuronal growth and regeneration and treating neurol.
        disorders)
     104987-11-3
IT
    RL: BAC (Biological activity or effector, except adverse); BPR
(Biological
    process); BIOL (Biological study); PROC (Process)
        (pipecolic acid deriv. inhibitors of rotamase enzyme activity for
        stimulating neuronal growth and regeneration and treating neurol.
       disorders)
     535-75-1D, Pipecolic acid, derivs.
IT
                                        141084-63-1 152754-33-1
                  152754-35-3
                                152754-36-4 152754-42-2 155668-86-3
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186834-82-2 186834-83-3

186834-84-4 186834-85-5 186834-86-6

186834-87-7 186834-88-8 200417-73-8 200728-03-6 200728-04-7 RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pipecolic acid deriv. inhibitors of rotamase enzyme activity for stimulating neuronal growth and regeneration and treating neurol. disorders)

IT 9025-75-6, Calcineurin 95076-93-0, Rotamase
RL: BPR (Biological process); BIOL (Biological study); PROC (Process)
 (pipecolic acid deriv. inhibitors of rotamase enzyme activity for stimulating neuronal growth and regeneration and treating neurol. disorders)

ΙT

130939-66-1, Neurotrophin 3
RL: BAC (Biological activity or effector, except adverse); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(pipecolic acid deriv. inhibitors of rotamase enzyme activity for stimulating neuronal growth and regeneration and treating neurol.

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53123-88-9 REGISTRY
RN
CN
     Rapamycin (9CI)
                      (CA INDEX NAME)
OTHER CA INDEX NAMES:
     23,27-Epoxy-3H-pyrido[2,1-c][1,4]oxaazacyclohentriacontine, rapamycin
     deriv.
OTHER NAMES:
     (-)-Rapamycin
CN
     (3S, 6R, 7E, 9R, 10R, 12R, 14S, 15E, 17E, 19E, 21S, 23S, 26R, 27R, 34aS) -
CN
     9,10,12,13,14,21,22,23,24,25,26,27,32,33,34,34a-Hexadecahydro-9,27-
     dihydroxy-3-[(1R)-2-[(1S,3R,4R)-4-hydroxy-3-methoxycyclohexyl]-1-
     methylethyl]-10,21-dimethoxy-6,8,12,14,20,26-hexamethyl-23,27-epoxy-3H-
     pyrido[2,1-c][1,4]oxaazacyclohentriacontine-1,5,11,28,29(4H,6H,31H)-
     pentone
     23,27-Epoxy-3H-pyrido[2,1-c][1,4]oxaazacyclohentriacontine-
CN
     1,5,11,28,29(4H,6H,31H)-pentone,
9, 10, 12, 13, 14, 21, 22, 23, 24, 25, 26, 27, 32, 33,
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CN
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     AY 22989
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     Rapamune
     SIIA 9268A
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CN
     Sirolimus
CN
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       CHEMCATS, CHEMINFORMRX, CIN, CSCHEM, DDFU, DIOGENES, DRUGNL, DRUGPAT,
       DRUGU, DRUGUPDATES, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE,
MRCK*,
       MSDS-OHS, NAPRALERT, PHAR, PROMT, RTECS*, SYNTHLINE, TOXLINE, TOXLIT,
       USAN, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:
Absolute stereochemistry.
Double bond geometry as shown.
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L27 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS

PAGE 2-A

1328 REFERENCES IN FILE CA (1967 TO DATE)
77 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1334 REFERENCES IN FILE CAPLUS (1967 TO DATE)

Ме

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L19 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2001 ACS
     . . . isomerase or rotamase enzyme activity, to stimulate or promote
ΑB
     neuronal growth or regeneration. The compds, of the invention (e.g.
     Way-124,666; SLB-506) are useful for the treatment of
     neurol. disorders. The compds. may be used in conjunction with a neurotrophic factor (neurotrophic. . .
```

ACCESSION NUMBER: 1997:151523 CAPLUS

DOCUMENT NUMBER: 126:152817

Pipecolic acid derivatives as inhibitors of rotamase TITLE:

activity, and use in treatment of nervous system

disorders.

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PATENT INFORMATION:

P?	PATENT NO.				KIND DATE				APPLICATION NO.				DATE				
W(WO 1996-US9561										
	W:													CZ,			
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		LT,	LU,	LV,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	ΝZ,	PL,	PT,	RO,	RU,	SD,
		SE,															
	RW:													FI,			GR,
														CM,		GN	
US	5 5798	5798355			A 19980825				US 1995-474072			19950607					
US	5 5 6 9 6	5696135			A 19971209				US 1996-653905			19960528					
JΑ	J 9661	9661622			A1 1996123		1230		AU 1996-61622				1996	0605			
ΙA	J 7104	710423			B2 1999092 T 1997060		0923										
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	R: R 9608 I 9604	BE,	FR,	GR,	ΙE,	IT,	MC,	NL				•					
BI	9608	1485		Α		1999	0706		BI	R 19	96-8	485		1996	0605		
F	9604	137		А		1997	0115		F	I 19	96-4	137		1996	1015		
SI	SE 9604097 DK 9601256		A		19961208			SI	E 19	96-4	097		1996	1108			
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NO	9704	290		Α		1997	1204		N) 19	97 - 4	290		1997	0917		
ĮΑ	J 9948	793		Α	1	1999	1125		ΑŪ	J 19	99-4	8793		1999	0916		
PRIORI	ORITY APPLN. INFO			. :					U	S 19	95-4	7407	2	1995	0607		
									US	S 19	96-6	5390.	5	1996	0528		
									US	S 19	96-6	5390	2	1996	0528		
									Α	J 19	96-6	1622		1996	0605		
									W) 19	96-U	S956	1	1996	0605		

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L25 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS

RN 149438-31-3 REGISTRY

CN 27,31-Epoxy-5,36-etheno-1H,5H-pyrido[2,1-c][1,2,4]triazolo[1,2-

q][1,4,17,18]oxatriazacyclohentriacontine-1,3,9,15,19,25,26(2H,6H,10H,19aH)-heptone,7,8,11,14,16,17,20,21,22,23,27,28,29,30,31,32,33,36-octadecahydro-11,27-dihydroxy-17-[(1R)-2-[(1S,3R,4R)-4-hydroxy-3-methoxycyclohexyl]-1-methylethyl]-10,33-dimethoxy-6,8,12,14,28,34-hexamethyl-2-phenyl-,

(6S, 8R, 10R, 11R, 12E, 14R, 17S, 19aS, 27R, 28R, 31S, 33S, 34E) -

(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 27,31-Epoxy-5,36-etheno-1H,5H-pyrido[2,1-c][1,2,4]triazolo[1,2-

q][1,4,17,18]oxatriazacyclohentriacontine-1,3,9,15,19,25,26(2H,6H,10H,19aH)-heptone,7,8,11,14,16,17,20,21,22,23,27,28,29,30,31,32,33,36-octadecahydro-11,27-dihydroxy-17-[2-(4-hydroxy-3-methoxycyclohexyl)-1-methylethyl]-10,33-dimethoxy-6,8,12,14,28,34-hexamethyl-2-phenyl-,

[6S-[6R*,8S*,10S*,11S*,12E,14S*,17R*[S*(1R*,3S*,4S*)],19aR*,27S*,28S*,31R*,33R*,34E]]-[partial]-

OTHER NAMES:

CN WAY 124466

FS STEREOSEARCH

MF C59 H84 N4 O15

SR CA

LC STN Files: CA, CANCERLIT, CAPLUS, MEDLINE, TOXLINE, TOXLIT, USPATFULL

Ring System Data

Elemental Analysis EA	Elemental Sequence ES +========	the Rings	Ring System Formula RF	Identifier RID	Count
C6 C6 C2N3-C4N2- C5N-C5O-	C6 C6	6 6 5-6-6-6-29 	C6 C6	46.150.1 46.150.18 55790.1.1	1 1

Absolute stereochemistry. Double bond geometry as described by E or Z. Currently available stereo shown.

PAGE 1-B

PAGE 2-A

10 REFERENCES IN FILE CA (1967 TO DATE)